

**REVIEW BY FORT BEND COUNTY
COMMISSIONERS COURT**

**Fort Bend County
Engineering Department**
301 Jackson Suite 401
Richmond, Texas 77469
281.633.7500
Permits@fortbendcountytx.gov

☐

Right of Way Permit

☒

Commercial Driveway Permit

Permit No: 2017-12115

Applicant: Gulf South Pipeline Company, LP by GS Pipeline Company, LLC

Job Location Site: 24910 Westheimer Parkway , Fort Bend, TX 77494

Bond No. **Date of Bond:** 2/16/2017 **Amount:** \$50,000.00

The above applicant came to make use of certain Fort Bend County property subject to, "The Order Regulating the Laying, Construction, Maintenance, and Repair of Buried Cables, Conduits, and Pole Lines, In, Under, Across or Along Roads, Streets, Highways, and Drainage Ditches in Fort Bend County, Texas, Under the Jurisdiction of the Commissioners Court of Fort Bend County, Texas," as passed by the Commissioners Court of Fort Bend County, Texas, of the Minutes of the Commissioners Court of Fort Bend County, Texas, to the extent that such order is not inconsistent with Chapter 181, Vernon's Texas Statutes and Codes Annotated.

Notes:

1. Evidence of review by the Commissioners Court must be kept on the job site and failure to do so constitutes grounds for job shutdown.
2. Written notices are required:
 - a. 48 hours in advance of construction start up, and
 - b. When construction is completed and ready for final inspection, submit notification to Permit Administrator thru MyGovernmentOnline.org portal.
3. This permit expires one (1) year from date of permit if construction has not commenced.

On this 28th day of February, 2017, Upon Motion of Commissioner Morales, seconded by Commissioner Patterson, duly put and carried, it is ORDERED, ADJUDGED AND DECREED that said notice of said above purpose is hereby acknowledged by the Commissioners Court of Fort Bend County, Texas, and that said notice be placed on record according to the regulation order thereof.

Signature

Presented to Commissioners Court and approved.

By:

Charles O. Ay

for

County Engineer

N/A

By:

Drainage District Engineer/Manager

Date Recorded 3-9-17

Comm. Court No. 14J

Clerk of Commissioners Court

By:

Bonnie Wilts
Deputy



**PERMIT APPLICATION REVIEW FORM FOR
CABLE, CONDUIT, AND POLE LINE ACTIVITY
IN FORT BEND COUNTY**

**Fort Bend County
Engineering Department**
301 Jackson Suite 401
Richmond, Texas 77469
281.633.7500
Permits@fortbendcountytexas.gov

☐

Right of Way Permit

☒

Commercial Driveway Permit

Permit No: 2017-12115

The following "Notice of Proposed Cable, Conduit, and/or Pole Line activity in Fort Bend County" and accompanying attachments have been reviewed and the notice conforms to appropriate regulations set by Commissioner's Court of Fort Bend County, Texas.

(1) COMPLETE APPLICATION FORM:

- | | |
|-------------------------------------|--|
| <input checked="" type="checkbox"/> | a. Name of road, street, and/or drainage ditch affected. |
| <input checked="" type="checkbox"/> | b. Vicinity map showing course of directions |
| <input checked="" type="checkbox"/> | c. Plans and specifications |

(2) BOND:

- | | | | |
|-------------------------------------|--|---|---------------------|
| <input type="checkbox"/> | County Attorney, approval when applicable. | | |
| <input checked="" type="checkbox"/> | Perpetual bond currently posted. | Bond No: [REDACTED] | Amount: \$50,000.00 |
| <input type="checkbox"/> | Performance bond submitted. | Bond No: _____ | Amount: _____ |
| <input type="checkbox"/> | Cashier's Check | Check No: _____ | Amount: _____ |

(3) DRAINAGE DISTRICT APPROVAL (WHEN APPLICABLE):

Drainage District Approval

Date

We have reviewed this project and agree it meets minimum requirements.

Charles O. Ay

Permit Administrator

2/21/17

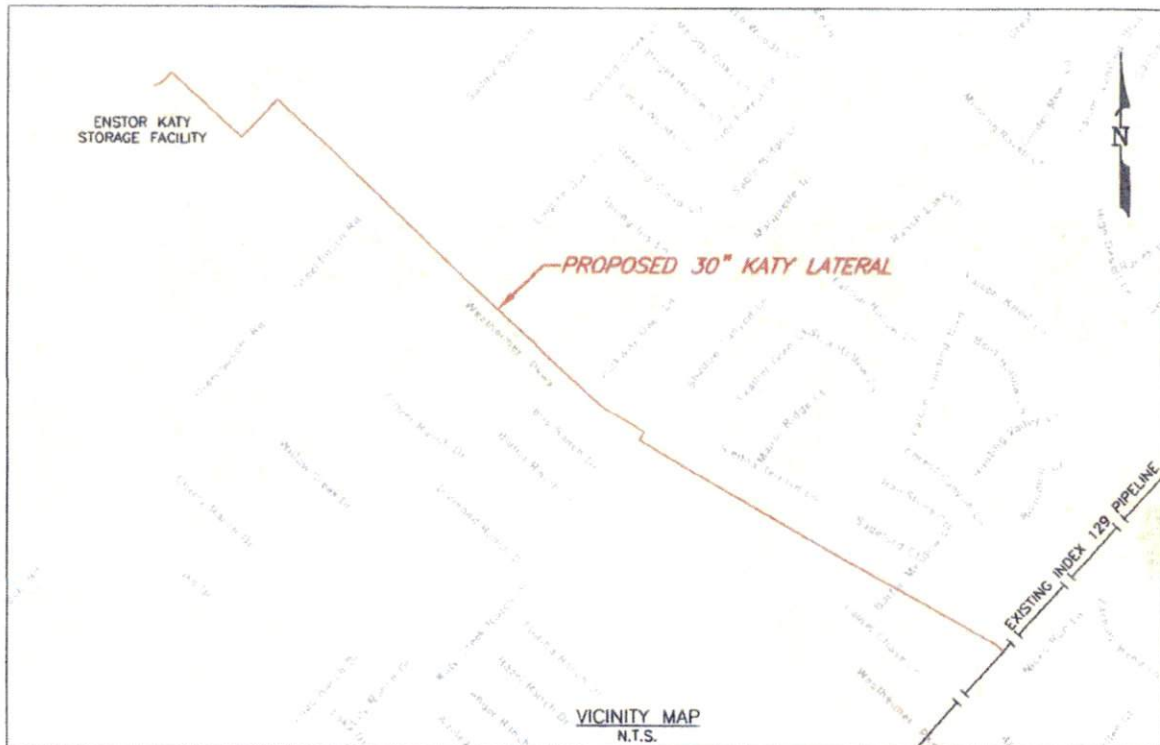
Date

GULF SOUTH[®]

PIPELINE

KATY LATERAL

FORT BEND COUNTY, TEXAS



PERMIT DRAWING INDEX

DRAWING NUMBER	DRAWING TITLE
16CA-129-72-P-104-01	BARTON MEADOW LANE
16CA-129-72-P-104-02	FALCON LANDING BOULEVARD
16CA-129-72-P-104-03	PARWAY OAKS LANE
16CA-129-72-P-104-04	COFFEE BEND
16CA-129-72-P-104-05	SADDLE SPUR LANE
16CA-129-72-P-104-06	WESTHEIMER PARKWAY
16CA-129-72-P-114-01	TEMP. ACCESS ROAD DRIVEWAY DETAIL
16CA-129-72-P-114-02	TEMP. DRIVEWAY DETAIL

PREPARED BY:



3100 S. GESSNER
SUITE 400
HOUSTON, TEXAS 77063
TEL: (859) 873-0076
www.ensiteusa.com



FORT BEND COUNTY ENGINEER

ENGINEER: Richard W. Stolleis, P.E., PTOE
for Richard W. Stolleis P.E.

DATE: 2/14/17

THESE SIGNATURES ARE VOID IF CONSTRUCTION HAS NOT COMMENCED IN (1) YEAR FROM DATE OF APPROVAL.

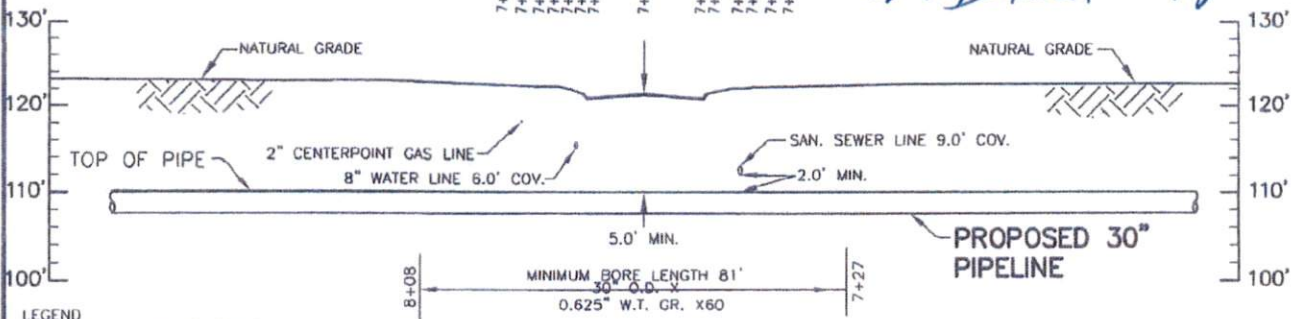
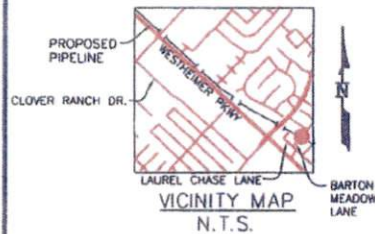
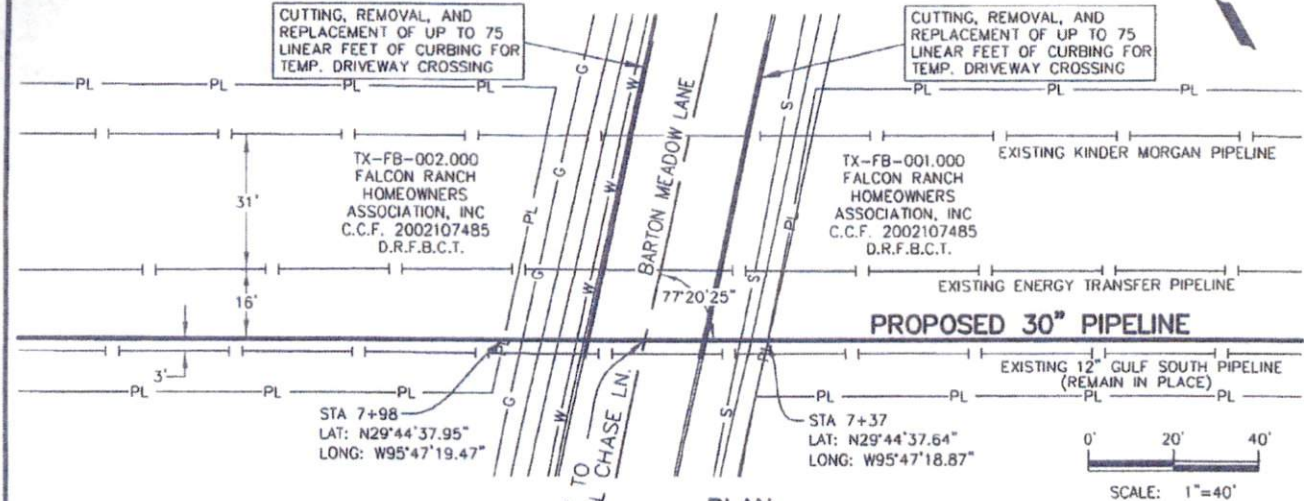
APPROVED: Casandro
for Development Coordinator

DATE: 2-13-17

EXHIBIT "A"

FORT BEND COUNTY, TEXAS

I.&G. N. RR. CO. SURVEY A-265



LEGEND
N.T.S. NOT TO SCALE
CL CENTERLINE
PL PROPERTY LINE
R/W RIGHT-OF-WAY
CR COUNTY ROAD
HWY HIGHWAY
D.R.F.B.C.T. DEED RECORDS OF FORT BEND COUNTY, TEXAS

NOTE: BORE PITS ARE OUTSIDE OF R/W
DESIGN CODE/REG: ANSI B31.8/49CFR PART 192
PRODUCT CARRIED: NATURAL GAS
DESIGN FACTOR: 0.5, MAOP 936 PSIG
COATING: 14-16 MILS FBE/35 MILS ARO
DIA. 30", W.T. 0.625", GRADE X60
CATHODIC PROTECTION: IMPRESSED CURRENT
METHOD OF INST.: BORE
ALL COORDINATES ARE GIVEN IN NAD83 TEXAS STATE PLANE, SOUTH CENTRAL ZONE, US FOOT

APPROVED: *Cassandra S.*
for Development Coordinator
DATE: 2-13-17

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
0	11/30/16	EUSA	ISSUE FOR BID	6483	XXX
A	09/20/16	EUSA	ISSUED FOR REVIEW	6483	XXX

EnSiteUSA
12101 EAST 51st STREET
SUITE 104
TULSA, OK 74146
TEL: (918) 307-7600
www.ensiteusa.com

GULF SOUTH PIPELINE	
DRAWN EUSA	DATE 09/20/16
CHK'D EUSA	DATE 09/20/16
APP'D EUSA	DATE 09/20/16
SCALE 1"=40'	JOB NO. 6372

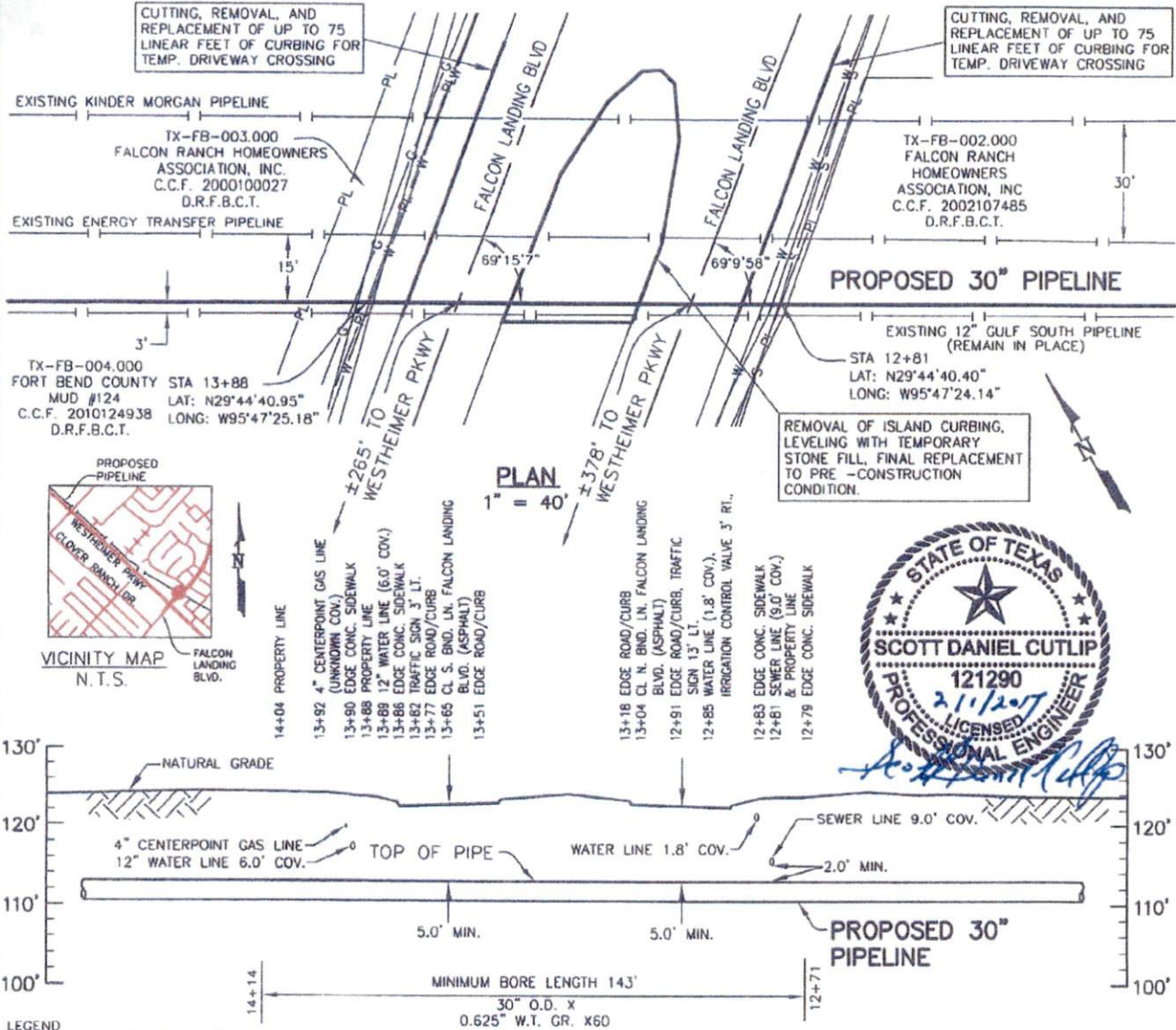
PERMIT DRAWING			
KATY STORAGE LATERAL PERMIT FOR PIPELINE AND TEMPORARY DRIVEWAY CROSSING BARTON MEADOW LANE FORT BEND COUNTY, TEXAS			
SHEET 1 OF 1	DWG NO. 16CA-129-72-P-104-01	REV 0	

EXHIBIT "A"

FORT BEND COUNTY, TEXAS

I.&G. N. RR. CO. SURVEY A-265

0' 20' 40'
SCALE: 1"=40'



LEGEND
N.T.S. NOT TO SCALE
CL CENTERLINE
PL PROPERTY LINE
R/W RIGHT-OF-WAY
CR COUNTY ROAD
HWY HIGHWAY
D.R.F.B.C.T. DEED RECORDS OF FORT BEND COUNTY, TEXAS

NOTE: BORE PITS ARE OUTSIDE OF R/W
DESIGN CODE/REG: ANSI B31.8/49CFR PART 192
PRODUCT CARRIED: NATURAL GAS
DESIGN FACTOR: 0.5, MAOP 936 PSIG
COATING: 14-16 MILS FBE/35 MILS ARO
DIA. 30", W.T. 0.625", GRADE X60
CATHODIC PROTECTION: IMPRESSED CURRENT
METHOD OF INST.: BORE
ALL COORDINATES ARE GIVEN IN NAD83 TEXAS STATE PLANE, SOUTH CENTRAL ZONE, US FOOT

PROFILE
HORIZ: 1" = 40'
VERT: 1" = 20'

APPROVED: *Casandre*
for Development Coordinator
DATE: 2-13-17

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
0	11/30/16	EUSA	ISSUE FOR BID	8483	XXX
A	09/20/16	EUSA	ISSUED FOR REVIEW	8483	XXX

PERMIT DRAWING

KATY STORAGE LATERAL
PERMIT FOR PIPELINE AND TEMPORARY DRIVEWAY
CROSSING
FALCON LANDING BOULEVARD
FORT BEND COUNTY, TEXAS

SHEET 1 OF 1 DWG NO. 16CA-129-72-P-104-02 REV 0



12101 EAST 51st STREET
SUITE 104
TULSA, OK 74146
TEL: (918) 307-7600
www.ensiteusa.com



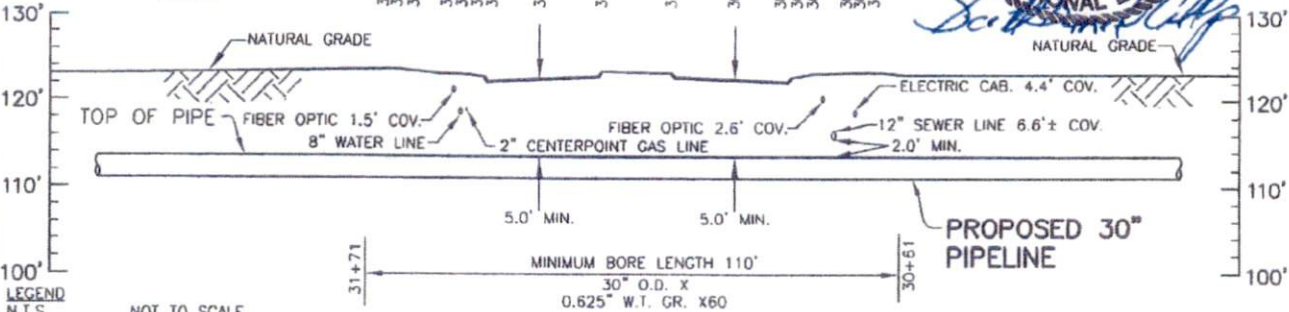
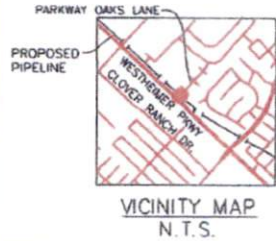
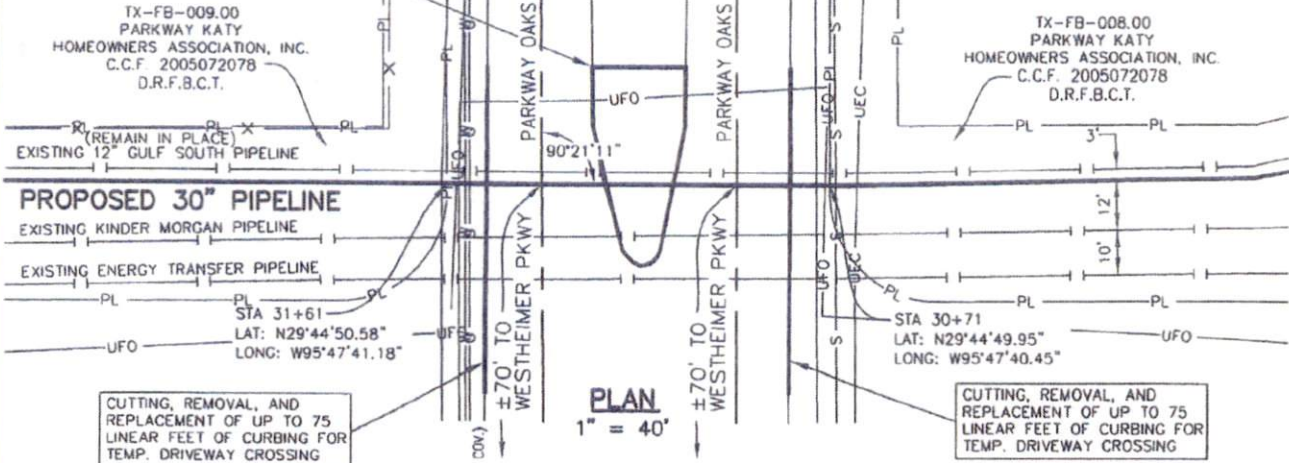
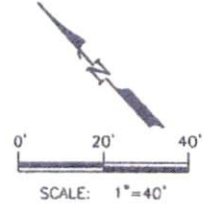
DRAWN EUSA	DATE 09/20/16
CHK'D EUSA	DATE 09/20/16
APP'D EUSA	DATE 09/20/16
SCALE 1"=40'	JOB NO. 6372

EXHIBIT "A"

FORT BEND COUNTY, TEXAS

I.&G. N. RR. CO. SURVEY A-265

REMOVAL OF ISLAND CURBING,
LEVELING WITH TEMPORARY
STONE FILL, FINAL REPLACEMENT
TO PRE-CONSTRUCTION
CONDITION.



LEGEND
N.T.S.
CL
PL
R/W
CR
HWY
D.R.F.B.C.T.

NOT TO SCALE
CENTERLINE
PROPERTY LINE
RIGHT-OF-WAY
COUNTY ROAD
HIGHWAY
DEED RECORDS OF FORT BEND COUNTY, TEXAS

NOTE: BORE PITS ARE OUTSIDE OF R/W
DESIGN CODE/REG: ANSI B31.8/49CFR PART 192
PRODUCT CARRIED: NATURAL GAS
DESIGN FACTOR: 0.5, MAOP 936 PSIG
COATING: 14-16 MILS FBE/35 MILS ARO
DIA. 30", W.T. 0.625", GRADE X60
CATHODIC PROTECTION: IMPRESSED CURRENT
METHOD OF INST.: BORE
ALL COORDINATES ARE GIVEN IN NAD83 TEXAS STATE
PLANE, SOUTH CENTRAL ZONE, US FOOT

APPROVED: *Casandrea*
for Development Coordinator
DATE: 2-13-17

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
0	11/30/16	EUSA	ISSUE FOR BID	6483	XXX
A	09/20/16	EUSA	ISSUED FOR REVIEW	6483	XXX

PERMIT DRAWING

KATY STORAGE LATERAL
PERMIT FOR PIPELINE AND TEMPORARY DRIVEWAY
CROSSING
PARKWAY OAKS LANE
FORT BEND COUNTY, TEXAS

SHEET	1 OF 1	DWG NO.	18CA-129-72-P-104-03	REV	0
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12101 EAST 51st STREET
SUITE 104
TULSA, OK 74146
TEL: (918) 307-7600
www.ensiteusa.com

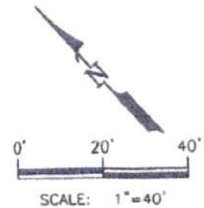


DRAWN	EUSA	DATE	09/20/16
CHK'D	EUSA	DATE	09/20/16
APP'D	EUSA	DATE	09/20/16
SCALE	1"=40'	JOB NO.	8372

EXHIBIT "A"

FORT BEND COUNTY, TEXAS

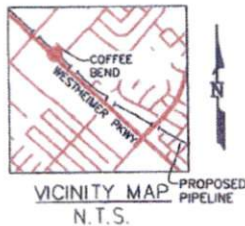
I.&G. N. RR. CO. SURVEY A-262



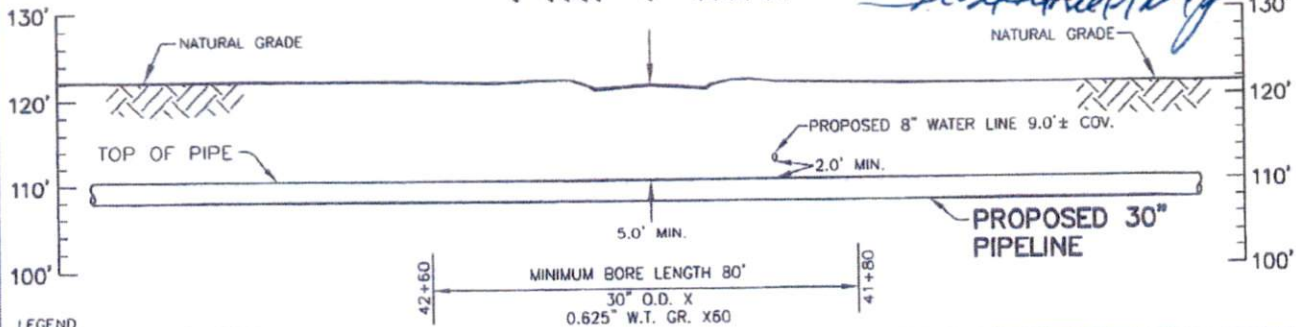
CUTTING, REMOVAL, AND REPLACEMENT OF UP TO 75 LINEAR FEET OF CURBING FOR TEMP. DRIVEWAY CROSSING

CUTTING, REMOVAL, AND REPLACEMENT OF UP TO 75 LINEAR FEET OF CURBING FOR TEMP. DRIVEWAY CROSSING

PLAN
1" = 40'



42+50 PROPERTY LINE
42+43 EDGE CONC. SIDEWALK
42+39 EDGE CONC. SIDEWALK
42+34 EDGE CONC. CURB
42+33 EDGE CONC. ROAD
42+20 CL COFFEE BEND, ASPH.
42+07 EDGE ROAD CURB
42+06 EDGE CONC. SIDEWALK
42+01 EDGE CONC. SIDEWALK
41+97 EDGE CONC. SIDEWALK
41+90 PROPOSED 8" WATER LINE (9.0' COV.)
41+90 PROPERTY LINE



LEGEND

N.T.S. NOT TO SCALE
CL CENTERLINE
PL PROPERTY LINE
R/W RIGHT-OF-WAY
CR COUNTY ROAD
HWY HIGHWAY
D.R.F.B.C.T. DEED RECORDS OF FORT BEND COUNTY, TEXAS

NOTE: BORE PITS ARE OUTSIDE OF R/W
DESIGN CODE/REG: ANSI B31.8/49CFR PART 192
PRODUCT CARRIED: NATURAL GAS
DESIGN FACTOR: 0.5, MAOP 936 PSIG
COATING: 14-16 MILS FBE/35 MILS ARO
DIA. 30", W.T. 0.625", GRADE X60
CATHODIC PROTECTION: IMPRESSED CURRENT
METHOD OF INST.: BORE
ALL COORDINATES ARE GIVEN IN NAD83 TEXAS STATE PLANE, SOUTH CENTRAL ZONE, US FOOT

PROFILE
HORIZ: 1" = 40'
VERT: 1" = 20'

APPROVED: *Asandrea K. G.*
Development Coordinator
DATE: 2-13-17

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
0	11/30/16	EUSA	ISSUE FOR BID	6483	XXX
A	09/20/16	EUSA	ISSUED FOR REVIEW	6483	XXX

PERMIT DRAWING

**KATY STORAGE LATERAL
PERMIT FOR PIPELINE AND TEMPORARY DRIVEWAY
CROSSING
COFFEE BEND**

FORT BEND COUNTY, TEXAS

SHEET 1 OF 1 DWG NO. 16CA-129-72-P-104-04 REV 0



12101 EAST 51st STREET
SUITE 104
TULSA, OK 74146
TEL: (918) 307-7600
www.ensiteusa.com



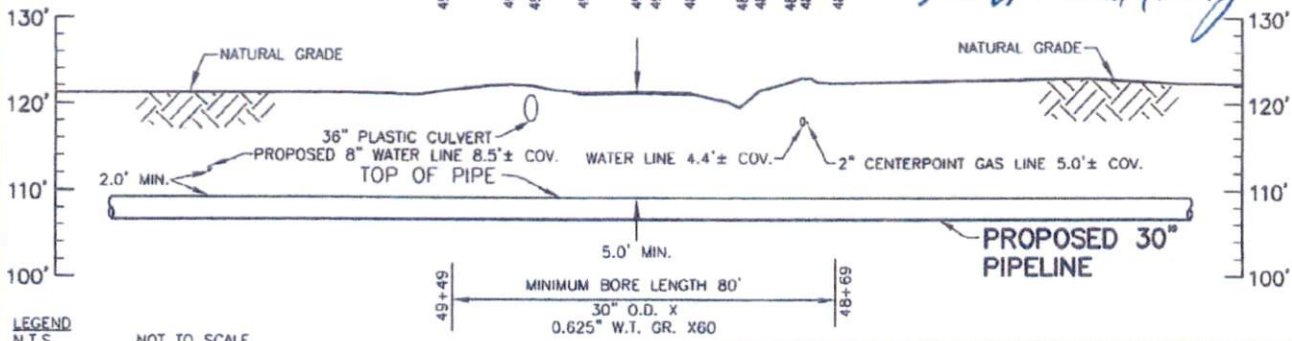
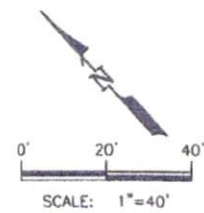
DRAWN EUSA	DATE 09/20/16
CHK'D EUSA	DATE 09/20/16
APP'D EUSA	DATE 09/20/16
SCALE 1"=40'	JOB NO. 8372

EXHIBIT "A"

FORT BEND COUNTY, TEXAS

I.&G. N. RR. CO. SURVEY A-262

EXTEND EXISTING CULVERT AND DRIVEWAY TO 30' IN WIDTH, PLACING STONE FILL OVER DRIVEWAY AND RETURNING BACK TO PREVIOUS CONDITION AFTER CONSTRUCTION



LEGEND
 N.T.S. NOT TO SCALE
 CL CENTERLINE
 PL PROPERTY LINE
 R/W RIGHT-OF-WAY
 CR COUNTY ROAD
 HWY HIGHWAY
 D.R.F.B.C.T. DEED RECORDS OF FORT BEND COUNTY, TEXAS

PROFILE
 HORIZ: 1" = 40'
 VERT: 1" = 20'

APPROVED: *Casandrea*
 per Development Coordinator
 DATE: 2-13-17

NOTE: BORE PITS ARE OUTSIDE OF R/W
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 DIA. 30", W.T. 0.625", GRADE X60
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 METHOD OF INST.: BORE
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NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
0	11/30/16	EUSA	ISSUE FOR BID	6483	XXX
A	09/20/16	EUSA	ISSUED FOR REVIEW	6483	XXX

EnSite USA
 12101 EAST 51st STREET
 SUITE 104
 TULSA, OK 74146
 TEL: (918) 307-7600
 www.ensiteusa.com

GULF SOUTH PIPELINES	
DRAWN EUSA	DATE 09/20/16
CHK'D EUSA	DATE 09/20/16
APP'D EUSA	DATE 09/20/16
SCALE 1"=40'	JOB NO. 6372

PERMIT DRAWING		
KATY STORAGE LATERAL SADDLE SPUR LANE		
FORT BEND COUNTY,		TEXAS
SHEET 1 OF 1	DWG NO. 16CA-129-72-P-104-05	REV 0

EXHIBIT "A"

FORT BEND COUNTY, TEXAS

I.&G. N. RR. CO. SURVEY A-262



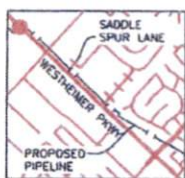
TX-FB-016.000
ENSTOR KATY STORAGE
& TRANSPORTATION
VOL. 2487, PG. 1138
D.R.F.B.C.T.

TX-FB-014.000
MARCEL PLAZA OF KATY, LLC.
C.C.F. 2016129283
C.C.F. 2016129284
D.R.F.B.C.T.

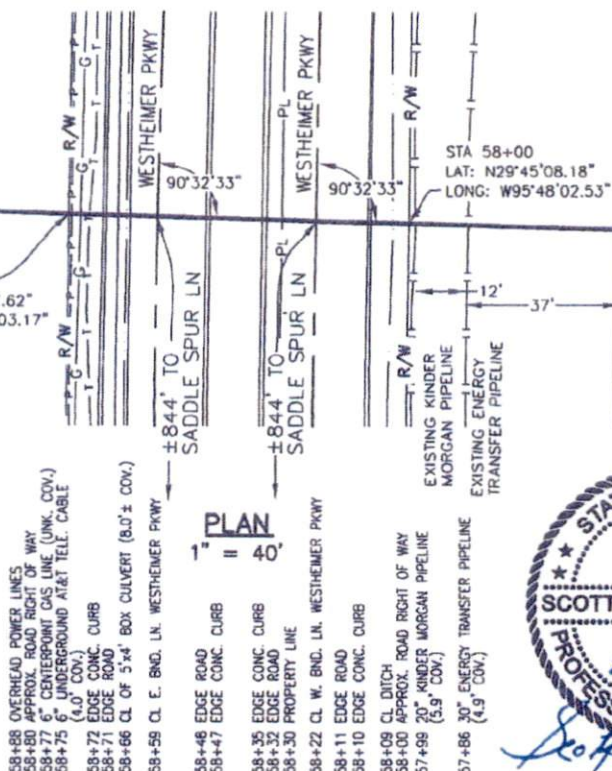
PROPOSED 30" PIPELINE

STA 58+80
LAT: N29°45'07.62"
LONG: W95°48'03.17"

STA 58+00
LAT: N29°45'08.18"
LONG: W95°48'02.53"

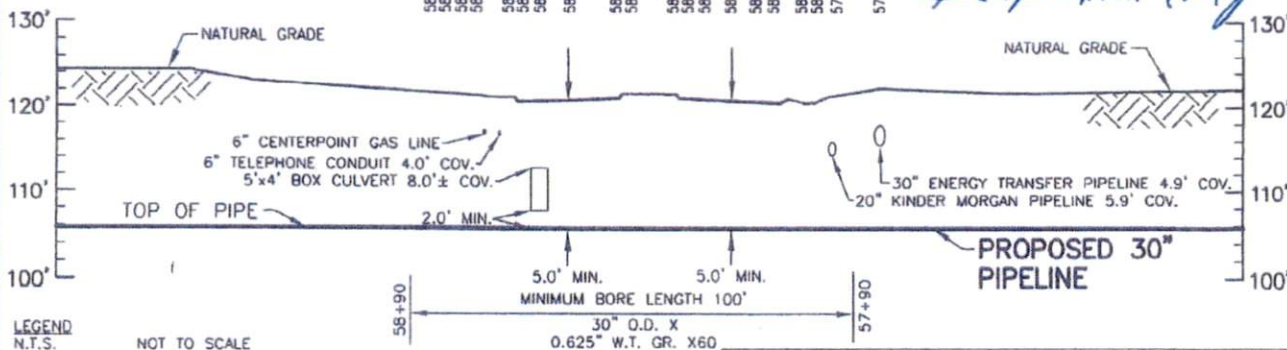


VICINITY MAP
N.T.S.



PLAN

1" = 40'



LEGEND

N.T.S. NOT TO SCALE
CL CENTERLINE
PL PROPERTY LINE
R/W RIGHT-OF-WAY
CR COUNTY ROAD
HWY HIGHWAY
D.R.F.B.C.T. DEED RECORDS OF FORT BEND COUNTY, TEXAS

NOTE: BORE PITS ARE OUTSIDE OF R/W
DESIGN CODE/REG: ANSI B31.8/49CFR PART 192
PRODUCT CARRIED: NATURAL GAS
DESIGN FACTOR: 0.5, MAOP 936 PSIG
COATING: 14-16 MILS FBE/35 MILS ARO
DIA. 30", W.T. 0.625", GRADE X60
CATHODIC PROTECTION: IMPRESSED CURRENT
METHOD OF INST.: BORE
ALL COORDINATES ARE GIVEN IN NAD83 TEXAS STATE
PLANE, SOUTH CENTRAL ZONE, US FOOT

PROFILE

HORIZ: 1" = 40'
VERT: 1" = 20'

APPROVED: *Cassandra S.*
Development Coordinator

DATE: 2-13-17

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
1	1/12/17	EUSA	REVISED PER REROUTE	6483	XXX
0	11/30/16	EUSA	ISSUE FOR BID	6483	XXX
A	09/20/16	EUSA	ISSUED FOR REVIEW	6483	XXX

PERMIT DRAWING

**KATY STORAGE LATERAL
WESTHEIMER PARKWAY**

FORT BEND COUNTY, TEXAS

SHEET 1 OF 1 DWG NO. 16CA-129-72-P-104-06 REV 1

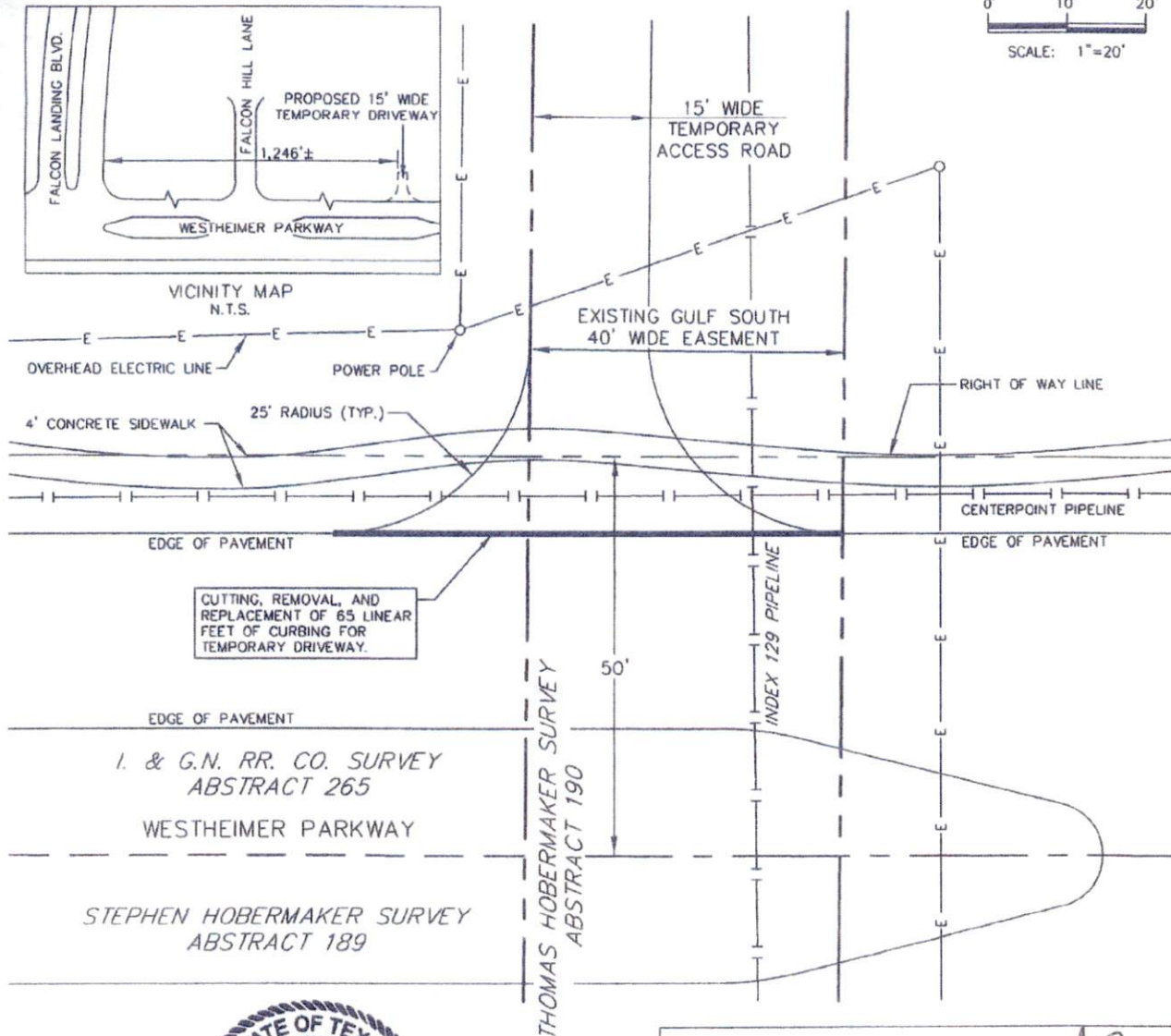
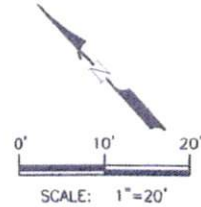


12101 EAST 51st STREET
SUITE 104
TULSA, OK 74146
TEL: (918) 307-7600
www.ensiteusa.com



DRAWN EUSA	DATE 09/20/16
CHK'D EUSA	DATE 09/20/16
APP'D EUSA	DATE 09/20/16
SCALE 1"=40'	JOB NO. 6372

EXHIBIT "A"
FORT BEND COUNTY, TEXAS
THOMAS HOBERMAKER SURVEY A-190 &
I.&G. N. RR. CO. SURVEY A-265



STATE OF TEXAS

SCOTT DANIEL CUTLIP
 121290
 2/1/2017
 LICENSED PROFESSIONAL ENGINEER
Scott Daniel Cutlip

APPROVED: *Casandro*
 per Development Coordinator
 DATE: *2-13-17*

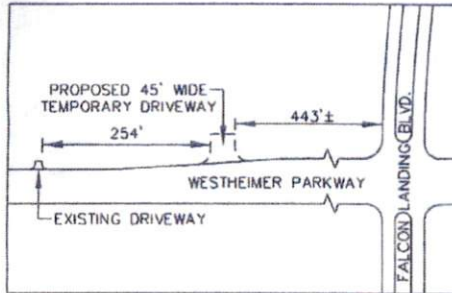
NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
0	01/25/17	EUSA	ISSUE FOR BID	6483	XXX

EnSiteUSA
 12101 EAST 51st STREET
 SUITE 104
 TULSA, OK 74146
 TEL: (918) 307-7600
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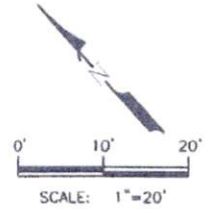
GULF SOUTH	
DRAWN EUSA	DATE 01/25/17
CHK'D EUSA	DATE 01/25/17
APP'D EUSA	DATE 01/25/17
SCALE 1"=20'	JOB NO. 6372

PERMIT DRAWING		
KATY STORAGE LATERAL TEMPORARY ACCESS ROAD DRIVEWAY DETAIL OFF WESTHEIMER PARKWAY FORT BEND COUNTY, TEXAS		
SHEET 1 OF 1	DWG NO. 16CA-129-72-P-114-01	REV 0

EXHIBIT "A"
FORT BEND COUNTY, TEXAS
 I.&G. N. RR. CO. SURVEY A-265

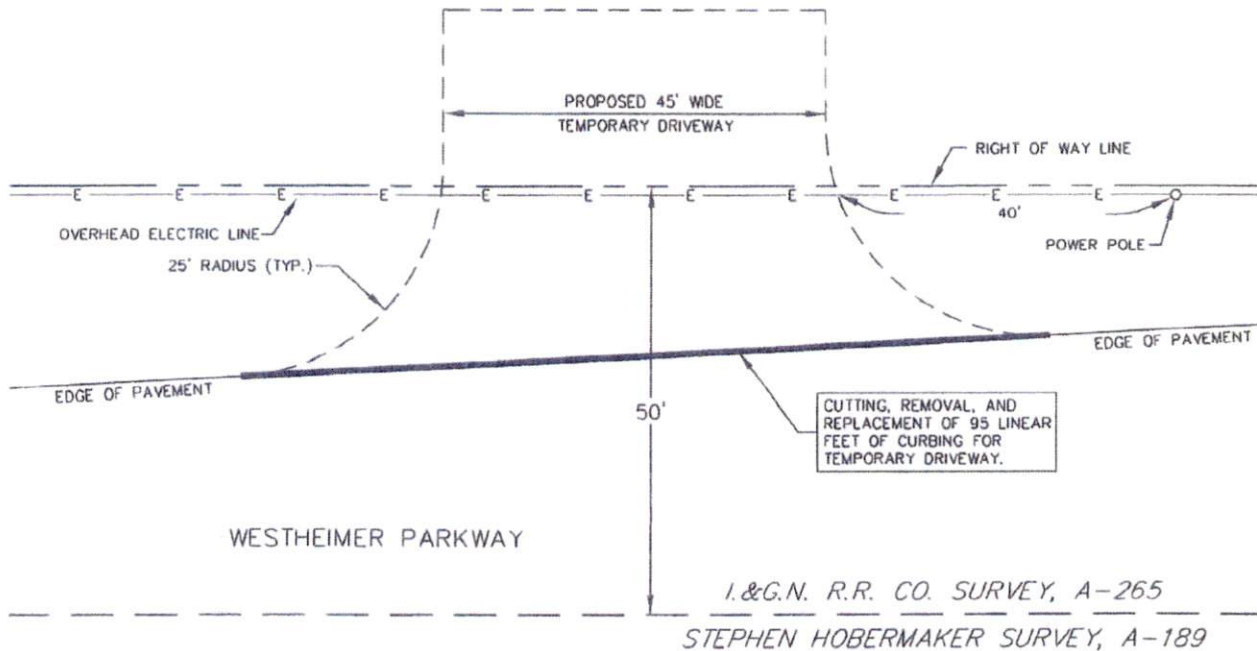


VICINITY MAP
 N.T.S.



SCALE: 1"=20'

TX-FB-004.000
 FORT BEND COUNTY MUNICIPAL
 UTILITY DISTRICT NO. 124
 C.C.F. 20101249.38
 D.R.F.B.C.T.



APPROVED: Casandre
 per Development Coordinator
 DATE: 2-13-17

NO.	DATE	BY	DESCRIPTION	PROJ. ID	APPR.
2	1/4/17	EUSA	REVISE ROAD NAME TO FALCON LANDING BLVD.	6483	XXX
1	12/15/16	EUSA	REVISE DRIVEWAY LOCATION	6483	XXX
0	12/07/16	EUSA	ISSUE FOR BID	6483	XXX

PERMIT DRAWING

KATY STORAGE LATERAL
 TEMPORARY DRIVEWAY DETAIL
 OFF WESTHEIMER PARKWAY
 FORT BEND COUNTY, TEXAS



12101 EAST 51st STREET
 SUITE 104
 TULSA, OK 74146
 TEL: (918) 307-7600
 www.ensiteusa.com

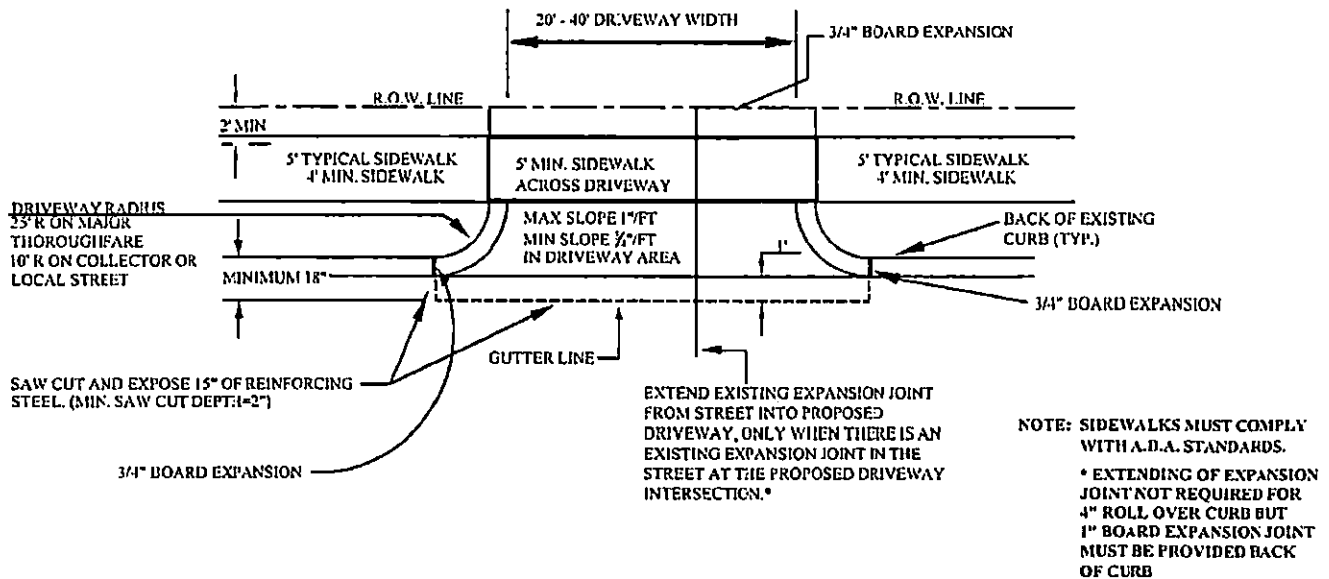


DRAWN EUSA	DATE 12/07/16
CHK'D EUSA	DATE 12/07/16
APP'D EUSA	DATE 12/07/16
SCALE 1"=20'	JOB NO. 6372

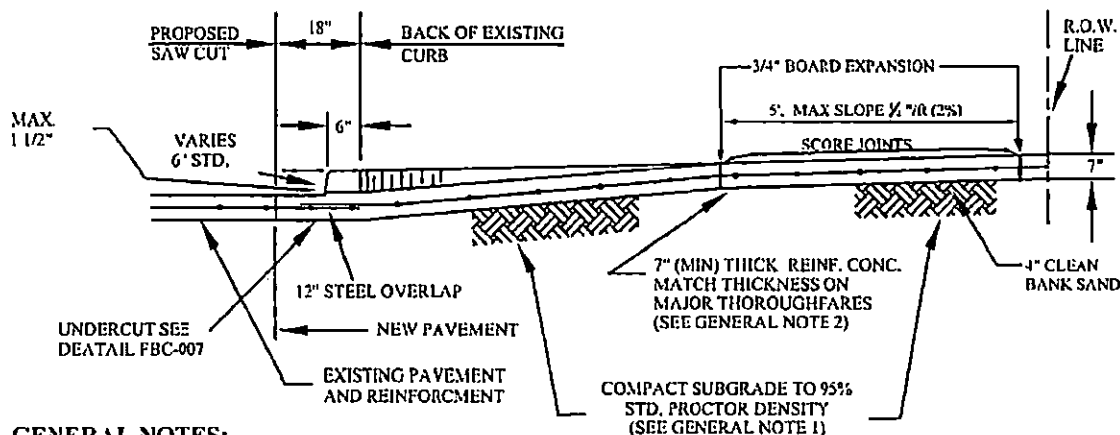
SHEET 1 OF 1	DWG NO. 16CA-129-72-P-114-02	REV 2
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WHEN A COMMERCIAL SIDEWALK, DRIVEWAY, CURB OR GUTTER IS CONSTRUCTED, RECONSTRUCTED, REPAIRED OR REGRADED ON COUNTY RIGHT-OF-WAY. FOR USE WITH CONCRETE OR ASPHALT CURB TYPE STREETS, USE SECTIONS APPLICABLE.

A. USE FOR ALL PROPOSED EXISTING CURB REMOVAL FOR DRIVEWAYS (PLAN VIEW NOT TO SCALE)



B. USE FOR ALL PROPOSED DRIVES ON CURBED TYPE STREETS



GENERAL NOTES:

1. COMPACT SUBGRADE FOR PROPOSED DRIVEWAY CONNECTION FROM PROPOSED SAW CUT AT EXISTING PAVEMENT TO R.O.W. LINE. COMPACT TO 95% OF STANDARD PROCTOR DENSITY (+/- 2% OPT. MOISTURE). THE COUNTY ENGINEER RESERVES THE RIGHT TO REQUIRE LABORATORY TESTS TO BE CONDUCTED.
2. PROPOSED DRIVEWAY REINFORCING STEEL IS TO BE #4 DEFORMED REINFORCING BARS (ASTM A615, GRADE 60, UNLESS NOTED) SPACED AT 24" C.C., EACH WAY, WITH 12" MINIMUM LAP FROM PROPOSED SAW CUT TO R.O.W. LINE.
3. PROPOSED DRIVEWAY SHALL BE CONSTRUCTED WITH PORTLAND CEMENT (5 SACKS (3000 PSI) OF CEMENT PER CUBIC YARD OF CONCRETE), CLASS "A" STRUCTURAL (REFER TO SPECIFICATION 03301), 7" THICK, FROM PROPOSED SAW CUT TO R.O.W. LINE.
4. PROPOSED SIDEWALK SHALL BE CONSTRUCTED WITH PORTLAND CEMENT (5 SACKS (3000 PSI) OF CEMENT PER CUBIC YARD OF CONCRETE), CLASS "A" STRUCTURAL (REFER TO SPECIFICATION 03301), 4" THICK.
5. FOR TYPICAL SIDEWALK DETAIL SEE FBC-011.

Handwritten signature and date:
2-13-17

SIDEWALKS & DRIVEWAYS ON
CURB TYPE STREETS
COMMERCIAL AREA

DRAWN BY: L. BRDECKA
DATE DRAWN: 2-1-94
APPROVED BY: L. HOOD
DATE: 2-1-94

REVISED BY: J. NETARDUS
DATE REVISED: 4-7-09
DRAWING NO.
FBC-025A

FORT BEND COUNTY ENGINEERING DEPARTMENT

GENERAL NOTES FOR SIDEWALKS AND DRIVEWAYS

1. SAW CUT EXISTING CURB AT EACH END AND KNOCK OUT CURB FROM BEGINNING TO END OF PROPOSED DRIVEWAY.
2. SAW CUT EXISTING PAVEMENT A MINIMUM OF 18" INCHES AWAY FROM BACK OF CURB (GUTTER LINE) AND BREAK OUT TO EXPOSE EXISTING REINFORCEMENT STEEL.
3. COMPACT SUBGRADE FOR PROPOSED DRIVEWAY CONNECTION FROM PROPOSED SAW CUT AT EXISTING PAVEMENT TO RIGHT-OF-WAY LINE, COMPACT TO 95% OF STANDARD PROCTER DENSITY (+/- 2% OPT. MOISTURE). THE COUNTY ENGINEER RESERVES THE RIGHT TO REQUIRE LABORATORY TESTS TO BE CONDUCTED.
4. PLACE AND COMPACT 4" CLEAN BANK SAND.
5. MAINTAIN GUTTER LINE WITH FACE OF EXISTING CURB.
6. PROPOSED DRIVEWAY REINFORCING STEEL IS TO BE TIED TO EXISTING ROADWAY REINFORCING STEEL WITH A MINIMUM LAP OF 12 INCHES.
7. PROPOSED DRIVEWAY REINFORCING STEEL IS TO BE #4 DEFORMED REINFORCING BARS (ASTM A615 GRADE 60, UNLESS NOTED) SPACED AT 24 INCHES C.C., EACH WAY, WITH 12 INCHES MINIMUM LAP (6" x 6" W6 x W6 AS ALTERNATE) FROM PROPOSED SAW CUT TO RIGHT-OF-WAY LINE.
8. PROPOSED DRIVEWAY, CURB, GUTTER LINE, AND GRADE SHALL MATCH EXISTING STREET.
9. PROPOSED DRIVEWAY SHALL BE CONSTRUCTED WITH PORTLAND CEMENT CONCRETE, CLASS "A" STRUCTURAL (REFER TO SPECIFICATION 03301), 7 INCHES THICK, FROM PROPOSED SAW CUT TO RIGHT-OF-WAY LINE (PROPERTY LINE).
10. PROPOSED SIDEWALK SHALL BE CONSTRUCTED WITH PORTLAND CEMENT CONCRETE, CLASS "A" STRUCTURAL (REFER TO SPECIFICATION 03301), 4 INCHES THICK AND 4 FEET MINIMUM WIDTH. SEE DRAWING NO. FBC 24A FOR ADDITIONAL INFORMATION AND DETAILS.

change
2-13-77

CONSTRUCTION NOTES FOR
SIDEWALKS & DRIVEWAYS WITH
CURB TYPE STREETS
COMMERCIAL AREA

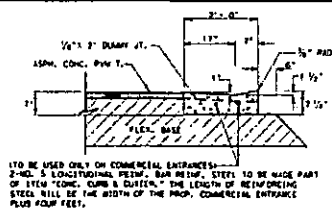
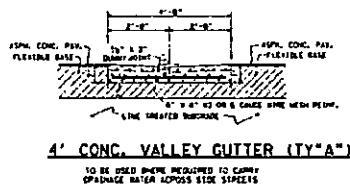
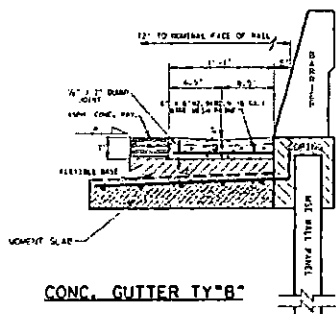
DRAWN BY: L. BRDECKA
DATE DRAWN: 2-1-94

REVISED BY: L. BRDECKA
DATE REVISED: 3-10-05

APPROVED BY: L. HOOD
DATE: 2-1-94

DRAWING NO.
FBC-025B

FORT BEND COUNTY ENGINEERING DEPARTMENT



TO BE USED ONLY ON COMMERCIAL ENTRANCES.
2-NO. 5 LONGITUDINAL REINF. BAR REINFORC. STEEL TO BE MADE PART OF TYPE "CONCRETE GUTTER". THE LENGTH OF REINFORCING STEEL SHALL BE THE WIDTH OF THE PAV. COMMERCIAL ENTRANCE PLUS FOUR FEET.

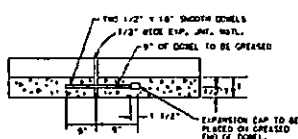
CONCRETE GUTTER
CONCRETE GUTTER TO BE USED ONLY WHERE PERMITTED BY TEXAS DEPARTMENT OF TRANSPORTATION REGULATIONS FOR ACCESS DRIVEWAYS.
TYPE "VALLEY GUTTER" SHALL BE PAID FOR AS CONCRETE CURB AND GUTTER. CONCRETE CURB & GUTTER & CONCRETE CURB SHALL BE MEASURED FOR PAYMENT ALONG FACE OF CURB AT FLOW LINE.

JOINTS MAY BE FORMED WITH 1/2" METAL PLATES AND FILLER REINFORCED. USUAL SPACING 10' O.C. MAX. SPACING 15' O.C.



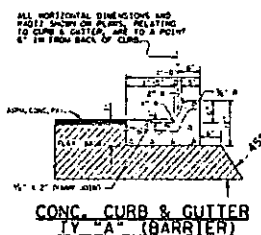
DETAIL DUMMY JOINT

DUMMY JOINTS TO BE USED ON CURB & GUTTER, CONCRETE, MEDIAN AND ALL TYPE OF VALLEY GUTTERS JOINTS TO BE LOCATED BY THE ENGINEER.

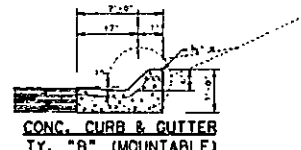


DETAIL EXPANSION JOINT

LONGITUDINAL SECTION TYPE CURB AND/OR CONC. REINFORCING STEEL (WHEN USED) SHALL NOT CROSS EXPANSION JOINTS. STEEL SHALL BE TERMINATED 3' FROM FACE OF THE JOINT.
1/2" PREMOULDED EXPANSION JOINT MATERIAL SHALL BE INSTALLED WHERE CONCRETE CURB & GUTTER OR CONC. CURB AND GUTTER MEET. BRIDGE RATCHMANS, BRIDGE ABUTMENTS AND/OR ANY OTHER LOCATIONS SPECIFIED BY THE ENGINEER. MAX. SPACING = 10'



CONCRETE CURB & GUTTER TYPE A (BARRIER)
CONCRETE CURB & GUTTER TO BE USED ONLY WHERE PERMITTED BY TEXAS DEPARTMENT OF TRANSPORTATION REGULATIONS FOR ACCESS DRIVEWAYS.
TYPE "VALLEY GUTTER" SHALL BE PAID FOR AS CONCRETE CURB AND GUTTER. CONCRETE CURB & GUTTER & CONCRETE CURB SHALL BE MEASURED FOR PAYMENT ALONG FACE OF CURB AT FLOW LINE.



CONCRETE CURB & GUTTER TYPE B (MOUNTABLE)
CONCRETE CURB & GUTTER TO BE USED ONLY WHERE PERMITTED BY TEXAS DEPARTMENT OF TRANSPORTATION REGULATIONS FOR ACCESS DRIVEWAYS.
TYPE "VALLEY GUTTER" SHALL BE PAID FOR AS CONCRETE CURB AND GUTTER. CONCRETE CURB & GUTTER & CONCRETE CURB SHALL BE MEASURED FOR PAYMENT ALONG FACE OF CURB AT FLOW LINE.

REV. 4/02		CNO, CNO	
NO.	DATE	NO.	DATE
1	1/1/02	2	1/1/02
3	1/1/02	4	1/1/02
5	1/1/02	6	1/1/02
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99	1/1/02	100	1/1/02



Traffic Control Plan Work Zone Safety

Gulf South Katy Texas Project in Fort Bend Co. 2017 Construction

In order to provide a safe working environment and to ensure the safety of the public when working around roads and highways, proper precautions must be taken to advise motorists of construction activities and to control traffic. Signs will be posted a min of one week before planned construction to alert residents of upcoming activities.

Qualified employees who have been trained according to the Texas Department of Transportation (TXDOT) traffic control plans must be assigned when work is being done adjacent to public roadways.

Signs must be used warning the oncoming traffic a distance as depicted in the following tables ahead of the area where work is being done. When working in or around curves or intersections be sure to put the signs far enough from the work to adequately warn the motorists.

After the work is done or when no work will be going on, the signs must be taken down. Do not leave signs up overnight. This can reduce the effectiveness of the signs when motorists drive by and see the signs and then never see work going on.

When flaggers are required, a minimum of two must be used. Flaggers must not have any other job duties until the need for traffic control is over. If they are relieved from duty, other employees who are qualified to flag and who have received the proper training must relieve them.

Equipment needed:

- Stop/Slow signs
- High Visibility vests
- Caution Flags
- Caution Signs (construction work ahead, utility work, etc.)
- Radios/Communication equipment
- Cones

Predetermination of Crossings

Gulf South and its Service Firm EnSiteUSA has predetermined the number of R.O.W. crossings of public roads and will maintain a running schedule of approximate times and dates that each will occur.

Traffic Control Plan

All project construction contractor's will have a Traffic Control Plan (TCP) as outlined in Chapter 6C, "Temporary Traffic Control Elements," of the MUTCD to address the specific traffic hazards associated with each project. Each crew should develop a traffic control plan at the morning tailgate meeting. The crew must decide what devices shall be used, where they will be placed, and so on. This should be documented on the daily job briefing form. The following diagrams shall serve as a guide for the contractors TCP, with the exception that in Fort Bend County there is no requirement for having a Truck Mounted Attenuator (TMA) but ALL other requirements shall be adhered to.

The Construction Contractor's TCP shall encompass the following:

- The state and local requirements for traffic control in Texas
- The type of training required
- Who shall be trained
- Supervisor responsible for implementing and managing the TCP
- The recognized traffic control hazards or needs
- How the hazards will be abated or controlled
- The MUTCD is the federal regulation governing traffic control in the United States. The MUTCD is the minimum guideline that must be followed when controlling traffic. The Supervisor must check to see where the work is being done has a stricter traffic control standard. If so, the local standard shall apply to traffic control performed.
- Before the project begins, the Supervisor or crew leader shall discuss and document on Irbby form 115 any recognized traffic control needs or hazards. All traffic controls and hazard controls or abatements also must be documented daily.
- Signs required by this section shall be visible at all times when work is being performed, and shall be removed or covered promptly when the hazards no longer exist.
- Advance warning signs shall, as a minimum, be 48 inches on each side.
- Construction areas shall be posted with legible traffic signs at all points of hazard.
- When company vehicles are parked on the shoulder of Westheimer Parkway, as a minimum, one Shoulder Work sign must be posted.
- When paved shoulders a width of 8 feet or more are closed, a Shoulder Closed sign must be posted to warn traffic that a disabled vehicle may not be able to get off the roadway.
- All traffic control signs or devices used for protection of construction workers shall conform to the MUTCD.

- Advance warning signs must be posted in all directions of travel when vehicles or equipment are parked within 15 feet of the roadway.
 - Vehicle flashers or beacons shall be turned on when vehicles are parked within 15 feet of the roadway.

Advanced warning signs shall be spaced according to enclosed Tables:

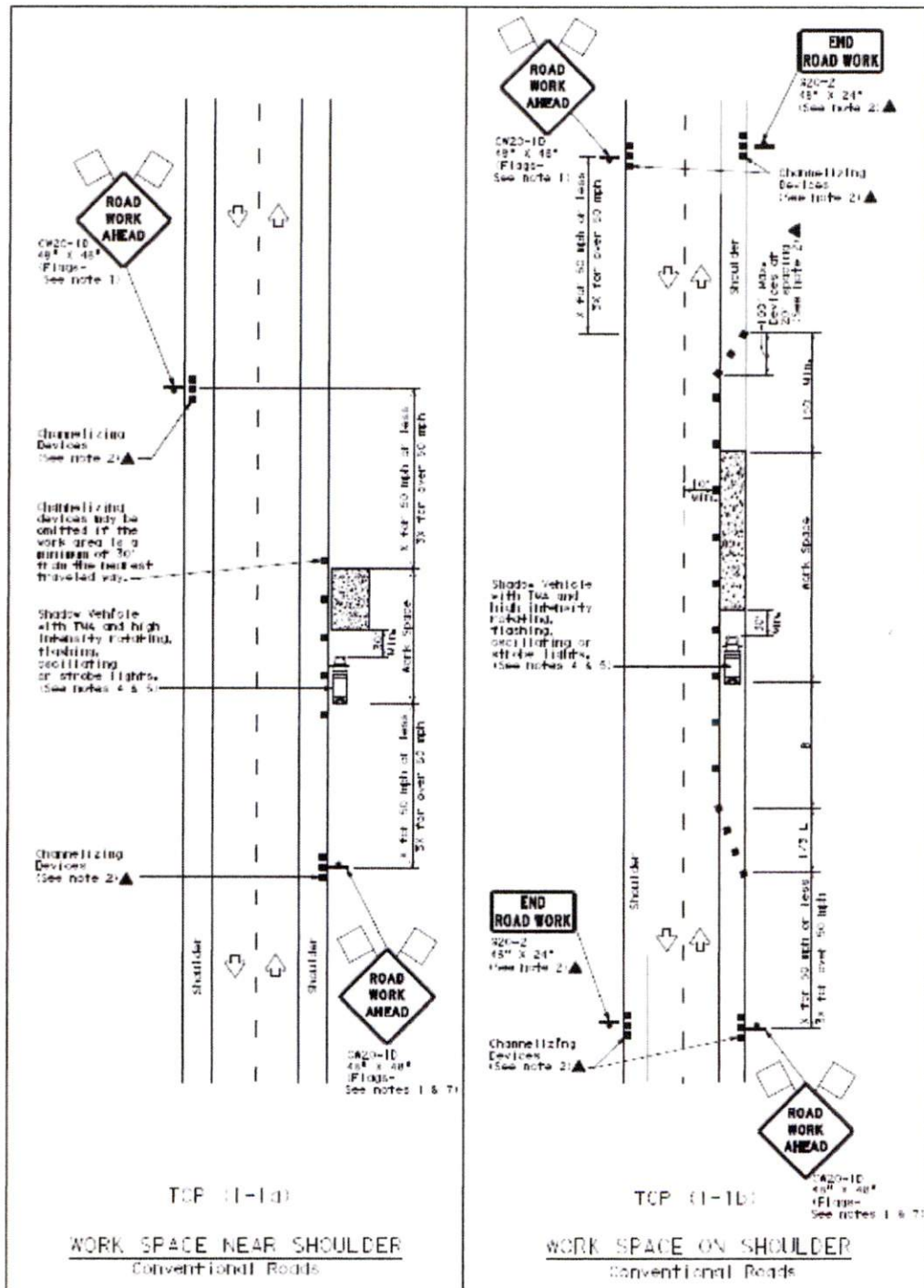
- Advance warning signs shall be upright and legible from at least 200 feet.
- Right-of-way entrances to puller and tensioner sites or other right-of-way locations that are used often during the day and that pull off of a frequently used roadway, must be marked with one advanced warning sign posted in each direction of travel.
- At least three 36-inch road cones shall be placed between the roadway and vehicles or equipment set up or parked with 15 feet of the roadway (three cones per vehicle).
- Cones must be positioned to provide adequate room for employees to walk between the cones and the vehicle. Where this is impractical, employees shall avoid the area.
- Employees working or walking within 15 feet of the roadway shall wear a reflective vest.
- Lane closures shall be set up according to figure 6H-10 in Chapter 6H of the MUTCD. A Be Prepared to Stop sign may be substituted or used in conjunction with sign "B" depending on state requirements.
- Temporary road closures shall be set up according to figure 6H-13 in Chapter 6H of the MUTCD.

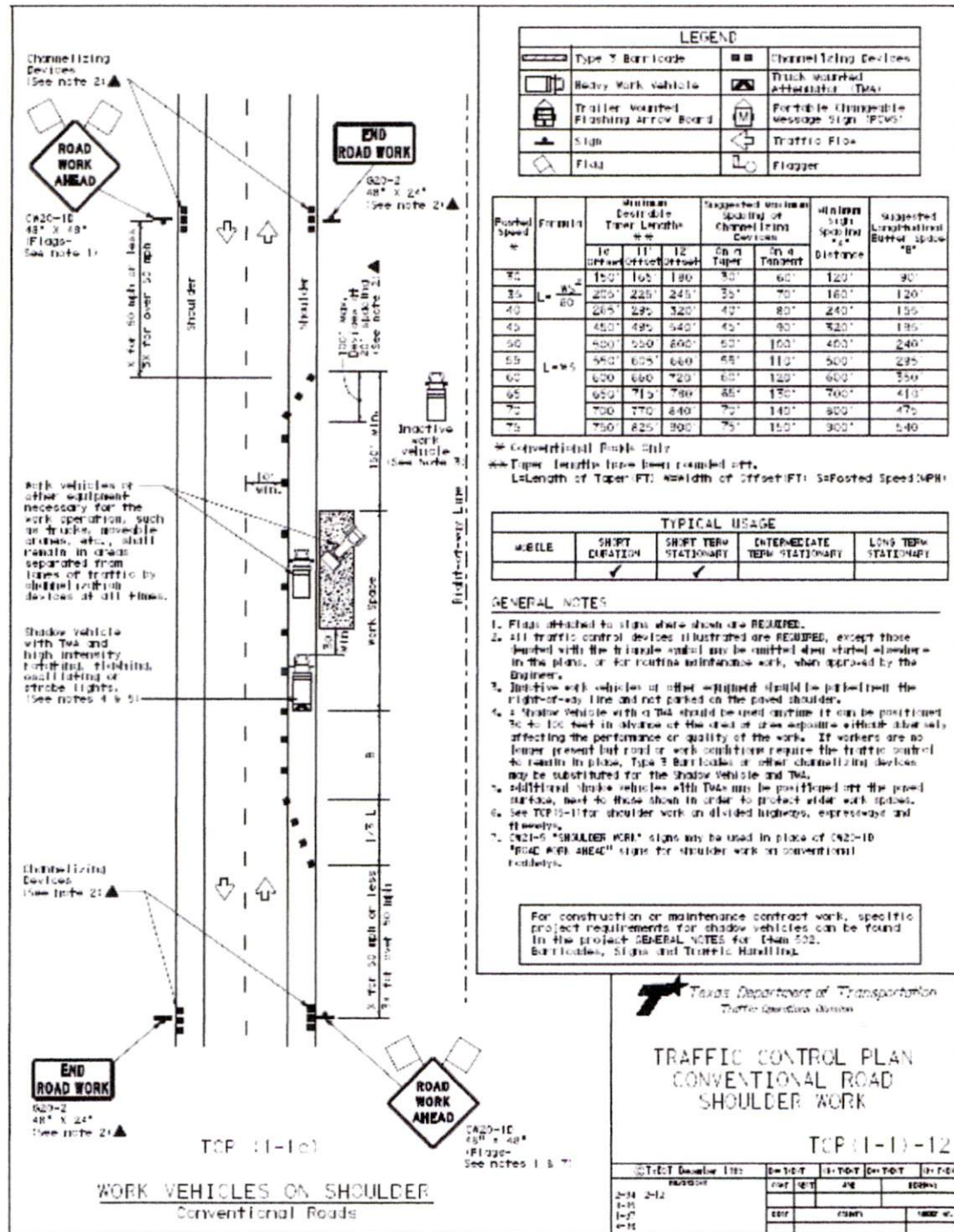
When setting up cones or other devices to channel traffic, the following taper formulas should be used:

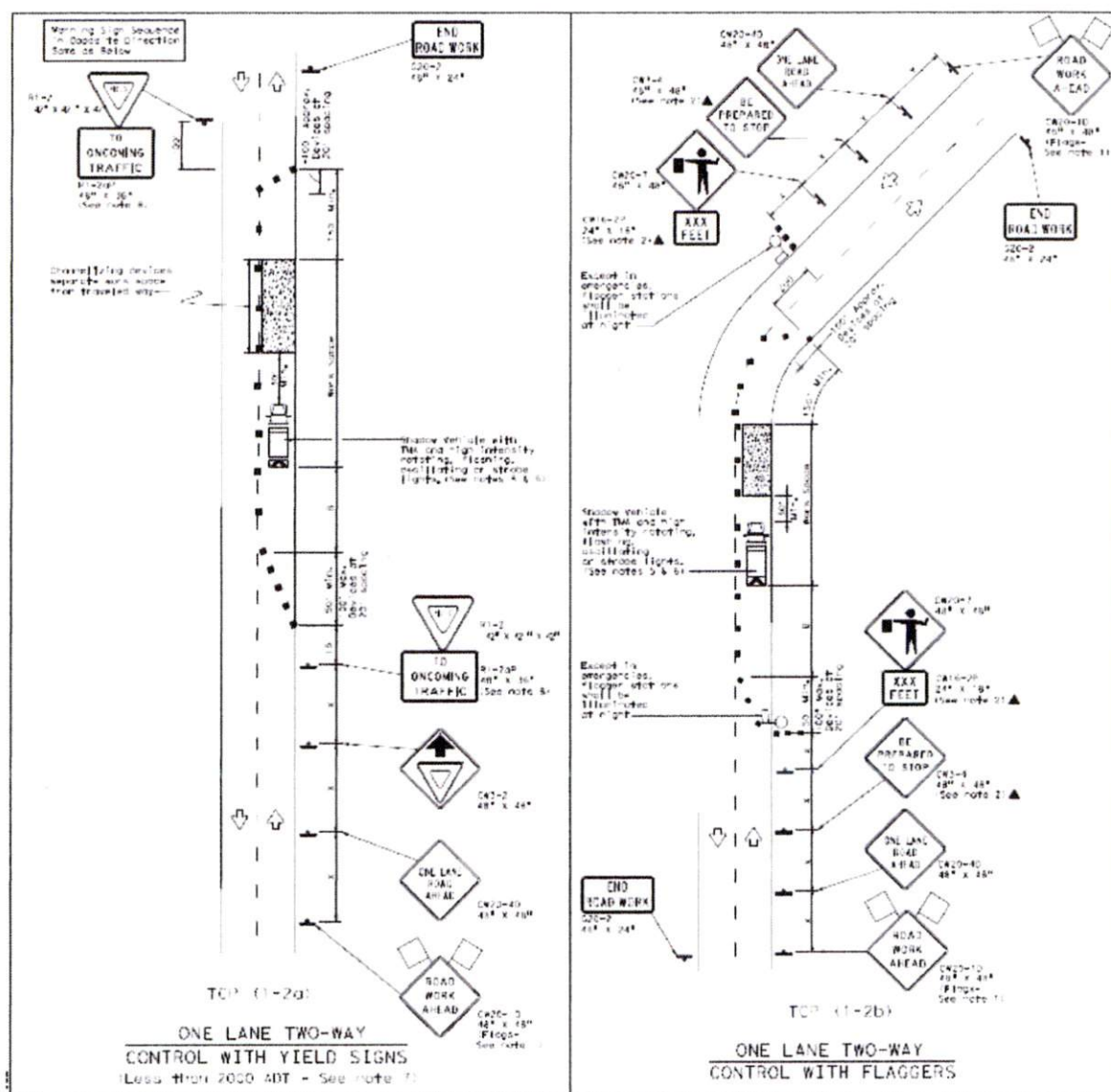
When signs, signals, and barricades do not provide the necessary protection on or adjacent to a street, flag persons or other appropriate traffic controls shall be provided.

EFFECTED ROADWAYS

The Attached road crossing permit drawings represent areas where work will occur







LEGEND									
	Type 1 Barricade		Channelizing Devices						
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)						
	Trailer Mounted Flashing Arrow Board		Portable Changeable Message Sign (PCMS)						
	Sign		Traffic Flow						
	Flag		Flagger						

Posted Speed S	Formula	Minimum Desirable Taper Lengths L			Suggested Minimum Spacing of Channelizing Devices		Minimum Sign Spacing S _{min}	Suggested Length of Buffer Space B _{min}	Stopping Sight Distance
		L ₁ Offset	L ₂ Offset	L ₃ Offset	S _{min} Type 1	S _{min} Type 2			
30	$L = \frac{4.5 S^2}{a}$	50'	155'	180'	30'	60'	120'	90'	200'
35		205'	225'	245'	35'	70'	160'	120'	250'
40		265'	295'	320'	40'	80'	240'	155'	305'
45		450'	495'	540'	45'	90'	320'	195'	360'
50		500'	550'	600'	50'	100'	400'	240'	425'
55	$L = 4S$	550'	625'	660'	55'	110'	500'	295'	495'
60		600'	660'	720'	60'	120'	600'	350'	540'
65		650'	715'	780'	65'	130'	700'	410'	645'
70		700'	770'	840'	70'	140'	800'	475'	730'
75		750'	825'	900'	75'	150'	900'	540'	820'

* Conventional Roads Only
 ** Taper lengths have been rounded off.
 L=Length of Taper (FT); W=Width of Offset (FT); S=Posted Speed (MPH)

TYPICAL USAGE				
VEHICLE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓		

GENERAL NOTES

- Flags attached to signs where shown are REQUIRED.
- All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when shown elsewhere in the plans, or for routine maintenance work, when approved by the Engineer.
- The "AHEAD" sign, when REQUIRED TO STOP sign may be installed after the W20-40 "ONE LANE ROAD AHEAD" sign, but other sign spacing shall be maintained.
- Sign spacing may be increased or an additional W20-40 "ROAD WORK AHEAD" sign may be used. Advance warning ahead of the flagger or W1-72 "YIELD" sign is less than 1500 feet.
- A shadow vehicle with a TMA should be used anytime it can be positioned 10 to 100 feet in advance of the area of crane exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 1 Barricades or other channelizing devices may be substituted for the shadow vehicle and TMA.
- Adult and shadow vehicles with TMAs may be positioned off the paved surface, next to trees shown in order to protect a city work space.


TCP (1-2a)

- W1-72 "YIELD" sign with traffic control may be used on projects with approaches that have adequate sight distances. For projects in urban areas, work spaces should be no longer than one half city block. In rural areas on roadways with less than 2000 AADT, work spaces should be no longer than 400 feet.
- W1-72 "YIELD" sign with W1-20a "TO ONCOMING TRAFFIC" plaque shall be placed on a support of a 4 foot minimum mounting height.

TCP (1-2b)

- Flaggers should use two-way radios or other methods of communication to control traffic.
- Length of work space should be based on the ability of flaggers to communicate.
- If the work space is located near a horizontal or vertical curve, the buffer distances should be increased in order to maintain adequate stopping sight distance to the flagger and a queue of stopped vehicles (see table above).
- Channelizing devices on the center-line may be omitted when a pilot car is leading traffic and approved by the Engineer.
- Flaggers should use 24" STOP/GO paddles to control traffic. Flags should be limited to emergency situations.

For construction or maintenance projects work, some of the project requirements for shadow vehicles can be found in the project GENERAL NOTES for Item 502, Barricades, Signs and Traffic Handling.



Texas Department of Transportation
Traffic Operations Division

TRAFFIC CONTROL PLAN

ONE-LANE TWO-WAY

TRAFFIC CONTROL

TCP (1-2)-12

DATE	BY	CHKD	APP	REV
12/12/2015	12/12			
12/12	12/12			
12/12	12/12			
12/12	12/12			



Fort Bend County Engineering
FORT BEND COUNTY, TEXAS

Richard W. Stolleis, P.E.
County Engineer

**Fort Bend County
Construction - General Notes**

1. Fort Bend County must be invited to the Pre-Construction Meeting.
2. Contractor shall notify Fort Bend County Engineering Department 48 hours prior to commencing construction and 48 hour notice to any construction activity within the limits of the paving at Construction@fortbendcountytexas.gov.
3. Contractor is responsible for obtaining all permits required from Fort Bend County prior to commencing construction of any improvements within County road right of ways.
4. All Paving Improvements shall be constructed in accordance with Fort Bend County "Rules, Regulations and Requirements" relating to the Approval and Acceptance of Improvements in Subdivisions as currently amended.
5. All road widths, curb radii and curb alignment shown indicates back of curb.
6. A continuous longitudinal reinforcing bar shall be used in the curbs.
7. All concrete pavement shall be 5 1/2 sack cement with a minimum compressive strength of 3500 psi at 28 days. Transverse expansion joints shall be installed at each curb return and at a maximum spacing of 60 feet.
8. All weather access to all existing streets and driveways shall be maintained at all times.
9. 4"x 12" reinforced concrete curb shall be placed in front of single family lots only. **All other areas shall be 6" reinforced concrete curb.**
10. At all intersection locations, **Type 7 ramps** shall be placed in accordance with **TXDOT Ped-12a** standard detail sheet. A.D.A. - Handicap Ramps shall be installed with street paving at all intersections and comply with current A.D.A. regulations.
11. Curb headers are required at curb connections to Handicap Ramps, with no construction joint within 5' of ramps.
12. All intersections utilizing Traffic Control measures shall have A.D.A. wheel chair ramps installed.
13. Guidelines are set forth in the Texas "Manual on Uniform Traffic Control Devices", as currently amended, shall be observed. The Contractor shall be responsible for providing adequate flagmen, signing, striping and warning devices, etc., during construction - both day and night.
14. All R1-1 stop signs shall be 30"x30" with diamond grade sheeting per Texas manual on uniform traffic control devices.
15. Street name signage shall be on a 9" high sign flat blade w/reflective green background. Street names shall be upper and lowercase lettering with uppercase letters of 6" minimum and lowercase letters of 4.5" minimum. The letters shall be reflective white. Street name signs shall be mounted on stop sign post.
16. A Blue Double Reflectorized button shall be placed at all Fire Hydrant locations. The Button shall be placed 12 inches off of the centerline of the street on the same side as the hydrant.

NOTE: Fort Bend County notes supersede any conflicting notes.

Inspection. The Project and all parts thereof shall be subject to inspection from time to time by inspectors designated by Fort Bend County. No such inspections shall relieve the Contractor of any of its obligations hereunder. Neither failure to inspect nor failure to discover or reject any of the work as not in accordance with the drawings and specifications, requirements and specifications of Fort Bend County or any provision of this Project shall be construed to imply an acceptance of such work or to relieve the Contractor of any of its obligations hereunder.

301 Jackson St., Suite 401, Richmond, TX 77469
Phone 281-633-7500